



1/1/08 D.A.C.

NOVCEL3CPDDDV

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Jeffrey A. Hubbell et al.

Patent No. 6911227

issued June 28, 2005

App. No : 09/811901

Filed : March 19, 2001

For : Gels for Encapsulation of Biological Materials

Examiner : Susan Berman

Art Unit : 1711

Conf # : 1025

12/04/2008 LHOUYEN1 00000033 6911227

01 FC:1464

130.00 OP

**Request for Correction of Assignee Under 37 CFR 3.81(b)**

**Mail Stop Petitions**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicants hereby resubmit a Petition under 37 C.F.R. § 3.81(b) to correct the name of the Assignee as indicated on the issued patent.

The above-referenced patent was filed as a continuation of US Application No. 08/783,387, filed January 13, 1997, now U.S. Patent No. 6,258,870, which is a divisional of US Application No. 08/484,160, filed June 7, 1995, now abandoned, which is a divisional of US Application No. 07/958,870, filed October 7, 1992, now U.S. Patent No. 5,529,914. The assignment from the inventors to Assignee, The Board of Regents, the University of Texas System, for US Application No. 07/958,870 is recorded at Reel 6536, Frame 0245. A copy of the Notice of Recordation is included herewith. The above represents the correct chain of title. Accordingly, the correct Assignee is The Board of Regents, the University of Texas System.

**Application No.: 09/811901**

**Filing Date:**

However as indicated on the front page of US Patent No. 6,911,227 (copy attached), the front page of US 6,911,227 incorrectly indicates "Novocell, Inc., Irvine, CA" as the Assignee due to Applicants' error in submitting the incorrect assignee name on PTOL-85B.

Applicant hereby submits that the failure to include the correct assignee name on the PTOL-85B was inadvertent and requests that a certificate of correction be issued to name the correct assignee: Board of Regents, The University of Texas Systems, Austin, TX, consistent with the recorded assignment.

A previously submitted petition to correct the name of the Assignee listed on the front page of US 6,911,227 was submitted on August 14, 2008. In response to this Petition, Applicants are in receipt of two letter from Assignment Services Branch (September 8 & 10, 2008) indicating that the database reflects the data as originally presented for recordation (copies attached). However, Applicants do not wish to correct the Assignment Database, but only the listed name of the Assignee on the issued patent.

This request includes :

- A. the processing fee as set forth in 37 C.F.R. § 1.17(h) (\$130)
- B. a statement that the failure to include the correct assignee name on the PTOL-85B was inadvertent (see above); and
- C. a copy of the Notice of Recordation of Assignment Document, reflecting the reel and frame number where the assignment is recorded (attached).

Applicant requests that the file be forwarded to Certificates of Correction Branch, for issuance of a Certificate of Correction, if the Request is granted.

As per the letter of July 1, 2008 from the US Patent and Trademark Office, no fee for consideration of Request for Certificate of Correction is believed to be required because it was previously submitted. However, if additional fees are required please charge Deposit Account No. 11-1410.

Application No.: 09/811901

Filing Date:



Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: Dec 1, 2008

By: Che Chereskin

Che Swyden Chereskin

Registration No. 41,466

Agent of Record

Customer No. 20,995

(949) 760-0404

Attachments: Notice of Recordation of Assignment  
Front page of US Patent No. 6911227  
Notice from Assignment Branch (2 sheets)

5784740\_2  
112608

Dec 7



Please Direct All Correspondence to Customer Number **20995**

**PETITION TRANSMITTAL**

Applicant : Hubbell, et al.  
App. No : 09/811,901  
Filed : March 19, 2001  
For : GELS FOR ENCAPSULATION OF  
BIOLOGICAL MATERIALS  
Examiner : Berman, Susan  
Art Unit : 1711

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

December 1, 2008

(Date)

Che Swyden Chereskin, Ph.D., Reg. No. 41,466

**Mail Stop Petitions**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing in the above-identified application are the following enclosures:

(X) Request for Correction of Assignee Under 37 C.F.R. 3.81(b) with attachments.

The present application qualifies for Small Entity Status under 37 CFR 1.27.

(X) A check in the amount of \$130 to cover the Petition Fee is provided.

(X) Return prepaid postcard.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Che Swyden Chereskin, Ph.D.

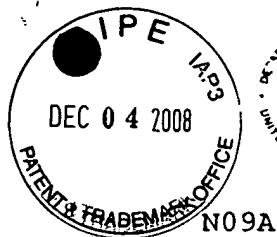
Registration No. 41,466

Agent of Record

Customer No. 20,995

(949) 760-0404

DATE: 06/08/93  
TO:



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

CAROL A. SCHNEIDER  
LYON & LYON  
THIRTY-FOURTH FLOOR  
611 WEST SIXTH STREET  
LOS ANGELES, CA 90017

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT ASSIGNMENT PROCESSING SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT BRANCH, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231

ASSIGNOR:  
HUBBELL, JEFFREY A.

DOC DATE: 01/22/93

ASSIGNOR:  
PATHAK, CHANDRASHEKHAR P.

DOC DATE: 01/22/93

ASSIGNOR:  
SAWHNEY, AMARPREET S.

DOC DATE: 01/22/93

ASSIGNOR:  
DESAI, NEIL P.

DOC DATE: 12/04/92

ASSIGNOR:  
HOSSAINY, SYED F. A.

DOC DATE: 01/20/93

RECORDATION DATE: 02/16/93    NUMBER OF PAGES 016    REEL/FRAME 6536/0245

DIGEST : ASSIGNMENT OF ASSIGNORS INTEREST

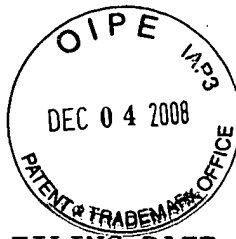
ASSIGNEE:  
BOARD OF REGENTS, THE  
UNIVERSITY OF TEXAS SYSTEM  
201 WEST 7TH STREET  
AUSTIN, TEXAS 78701

RECEIVED

JUN 25 1993

U.S. DEPARTMENT

6536/0245 PAGE 0002



SERIAL NUMBER 7-958870  
PATENT NUMBER

FILING DATE 10/07/92  
ISSUE DATE 00/00/00

*[Handwritten signature]*  
EXAMINER/PARALEGAL  
ASSIGNMENT BRANCH  
ASSIGNMENT/CERTIFICATION SERVICES DIVISION



US006911227B2

(12) **United States Patent**  
Hubbell et al.

(10) Patent No.: **US 6,911,227 B2**  
(45) Date of Patent: **Jun. 28, 2005**

(54) **GELS FOR ENCAPSULATION OF BIOLOGICAL MATERIALS**

(75) Inventors: **Jeffrey A. Hubbell**, Concord, MA (US); **Chandrashekhkar P. Pathak**, Waltham, MA (US); **Amarpreet S. Sawhney**, Newton, MA (US); **Nell P. Desai**, Los Angeles, CA (US); **Syed F. A. Hossainy**, Austin, TX (US)

(73) Assignee: **Novocell, Inc.**, Irvine, CA (US)

5/b The Board of Regents, the University of Texas System  
(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 234 days.

(21) Appl. No.: **09/811,901**

(22) Filed: **Mar. 19, 2001**

(65) **Prior Publication Data**

US 2002/0058318 A1 May 16, 2002

**Related U.S. Application Data**

(63) Continuation of application No. 08/783,387, filed on Jan. 13, 1997, now Pat. No. 6,258,870, which is a division of application No. 08/484,160, filed on Jun. 7, 1995, now abandoned, which is a division of application No. 07/958,870, filed on Oct. 7, 1992, now Pat. No. 5,529,914, which is a continuation-in-part of application No. 07/870,540, filed on Apr. 20, 1992, now abandoned, which is a continuation-in-part of application No. 07/843,485, filed on Feb. 28, 1992, now abandoned, and a continuation-in-part of application No. 07/740,703, filed on Aug. 5, 1991, now Pat. No. 5,380,536, and a continuation-in-part of application No. 07/598,880, filed on Oct. 15, 1990, now abandoned.

(51) Int. Cl.<sup>7</sup> ..... **A61J 3/07; B01J 13/02**

(52) U.S. Cl. .... **427/2.14; 427/2.1; 427/508; 427/512; 427/517; 427/519; 522/87; 522/88; 522/89; 522/167; 522/173; 522/181; 522/14; 522/28; 522/26; 527/200; 527/300**

(58) Field of Search ..... **427/2.14, 2.1, 427/508, 512, 517, 519; 522/87, 88, 89, 14, 26, 28; 527/200, 300**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,195,129 A	*	3/1980	Fukui et al.	435/182
4,321,117 A	*	3/1982	Kaetsu et al.	424/423
5,529,914 A	*	6/1996	Hubbell et al.	264/4
5,545,423 A	*	8/1996	Soon-Shiong et al.	424/484
5,700,848 A	*	12/1997	Soon-Shiong et al.	424/451
5,705,270 A	*	1/1998	Soon-Shiong et al.	424/493
5,759,578 A	*	6/1998	Soon-Shiong et al.	424/484
5,788,988 A	*	8/1998	Soon-Shiong et al.	264/4.1
5,801,033 A	*	9/1998	Hubbell et al.	264/4
5,843,743 A	*	12/1998	Hubbell et al.	424/463
5,846,530 A	*	12/1998	Soon-Shiong et al.	424/460
5,858,746 A	*	1/1999	Hubbell et al.	424/450
5,879,709 A	*	3/1999	Soon-Shiong et al.	424/484
6,258,870 B1	*	7/2001	Hubbell et al.	424/487

\* cited by examiner

*Primary Examiner*—Susan Berman

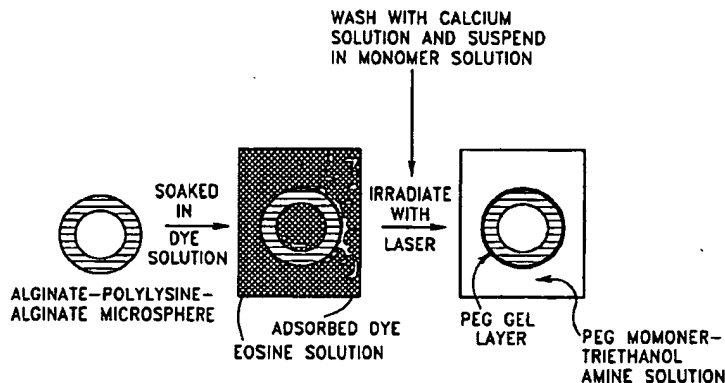
(74) *Attorney, Agent, or Firm*—Knobbe, Martens, Olson & Bear, LLP

(57)

**ABSTRACT**

This invention provides novel methods for the formation of biocompatible membranes around biological materials using photopolymerization of water soluble molecules. The membranes can be used as a covering to encapsulate biological materials or biomedical devices, as a "glue" to cause more than one biological substance to adhere together, or as carriers for biologically active species. Several methods for forming these membranes are provided. Each of these methods utilizes a polymerization system containing water-soluble macromers, species, which are at once polymers and macromolecules capable of further polymerization. The macromers are polymerized using a photoinitiator (such as a dye), optionally a cocatalyst, optionally an accelerator, and radiation in the form of visible or long wavelength UV light. The reaction occurs either by suspension polymerization or by interfacial polymerization. The polymer membrane can be formed directly on the surface of the biological material, or it can be formed on material, which is already encapsulated.

**9 Claims, 15 Drawing Sheets**





**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 08, 2008

PTAS



\*103521930A\*

CAROL A. SCHNEIDER  
LYON & LYON  
THIRTY-FOURTH FLOOR  
611 WEST SIXTH STREET  
LOS ANGELES, CA 90017

**UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF DISPOSITION OF DATABASE DISCREPANCY**

YOUR REQUEST TO CORRECT THE PATENT AND TRADEMARK ASSIGNMENT DATABASE SYSTEM HAS BEEN REVIEWED BY A PARALEGAL SPECIALIST OF THE ASSIGNMENT DIVISION. REVIEW OF THE MICROFILM RECORD LOCATED IN THE ASSIGNMENT SEARCH ROOM INDICATES THAT THE DATABASE REFLECTS THE DATA AS ORIGINALLY PRESENTED FOR RECORDATION. THEREFORE, TO CORRECT A PREVIOUSLY RECORDED DOCUMENT, A CORRECTIVE DOCUMENT MUST BE SUBMITTED AS OUTLINED IN 37 CFR 3.34.

SUBMIT CORRECTIVE DOCUMENT TO: U.S. PATENT AND TRADEMARK OFFICE,  
MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

IF YOU HAVE ANY QUESTIONS REGARDING THIS NOTICE, YOU MAY CONTACT THE INDIVIDUAL WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350.

REFERENCE: REEL/FRAME: 006536/0245

DOROTHY RILEY, PARALEGAL  
ASSIGNMENT SERVICES BRANCH  
PUBLIC RECORDS DIVISION





**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 10, 2008

PTAS



\*103521930A\*

CAROL A. SCHNEIDER  
LYON & LYON  
THIRTY-FOURTH FLOOR  
611 WEST SIXTH STREET  
LOS ANGELES, CA 90017

**UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF DISPOSITION OF DATABASE DISCREPANCY**

YOUR REQUEST TO CORRECT THE PATENT AND TRADEMARK ASSIGNMENT DATABASE SYSTEM HAS BEEN REVIEWED BY A PARALEGAL SPECIALIST OF THE ASSIGNMENT DIVISION. REVIEW OF THE MICROFILM RECORD LOCATED IN THE ASSIGNMENT SEARCH ROOM INDICATES THAT THE DATABASE REFLECTS THE DATA AS ORIGINALLY PRESENTED FOR RECORDATION. THEREFORE, TO CORRECT A PREVIOUSLY RECORDED DOCUMENT, A CORRECTIVE DOCUMENT MUST BE SUBMITTED AS OUTLINED IN 37 CFR 3.34.

SUBMIT CORRECTIVE DOCUMENT TO: U.S. PATENT AND TRADEMARK OFFICE,  
MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

IF YOU HAVE ANY QUESTIONS REGARDING THIS NOTICE, YOU MAY CONTACT THE INDIVIDUAL WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350.

REFERENCE: REEL/FRAME: 006536/0245

DOROTHY RILEY, PARALEGAL  
ASSIGNMENT SERVICES BRANCH  
PUBLIC RECORDS DIVISION